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ABSTRACT

In August 1996, the Washington State Board for Community and Technical Colleges conducted a study of the characteristics of workers enrolled in state and federally funded job skills enhancement training programs from 1990 to 1995 to determine related needs for the state's community and technical colleges. Data sources included a survey of 1,151 upgrading students at 8 representative colleges in November 1990; spring 1990 focus group interviews with upgrading students at 6 community colleges; data from college records and state unemployment records for all 13,200 upgrading students who left college during 1991-92; and System enrollment records from fall 1990 to fall 1995. Study findings included the following: (1) in fall 1995, workers enrolled to improve job skills represented 12% (n=26,721) of enrollments, down from 16% in fall 1990; (2) since the pool of 20-39 year olds most likely to enroll in upgrade programs has remained constant since 1990, the enrollment decline would seem to be due to shifting college priorities; (3) for all workers, the median age for college-level classes was 31, while for basic skills classes it was 28; (4) the median wage was $10.81 for workers in college-level programs and $7.93 for those in basic skills; and (6) wage differentials before and after upgrade training were not related to the extent of training received. A discussion of the November 1990 survey and the survey instrument are appended. (HAA)

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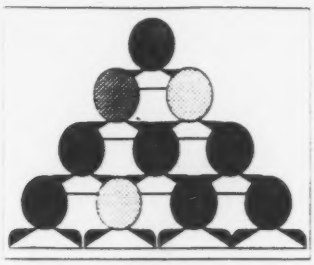

Research Report
No. 96-2

Washington State Board for Community and Technical Colleges; Education Division

JOB SKILLS ENHANCEMENT

AN EVALUATION OF PUBLICLY FUNDED POSTSECONDARY WORKFORCE TRAINING AND STATE AND FEDERALLY FUNDED BASIC SKILLS TRAINING FOR WORKERS UPGRADING THEIR JOB SKILLS

August 1996

Executive Summary

Evaluation Issues and Approaches

This study meets Senate Bill 5992 requirements for biennial program evaluation by the Washington State Board for Community and Technical Colleges (SBCTC) and the state's adult basic education providers.

SBCTC chose to research the job skills enhancement training area because service to this population is an important mission of the community and technical college system. It is an area which has received less attention than job preparatory training or retraining (HB 1988).

Data sources for this analysis include:

- A survey of 1,151 students at eight representative colleges was completed during November 1990. The survey included workers enrolled in developmental and college-level courses (Nolte).
- Focus group interviews with workers enrolled at six community colleges in spring 1990 (Borton).

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- Data matches with the Unemployment Insurance system wage records for the 13,200 basic skills and college-level students enrolled for job skills enhancement who left their college in 1991-92 (Simmons).
- College records of the approximately 27,000 workers enrolled to upgrade job skills each fall quarter from fall 1990 to fall 1995.

Key Findings

- Job skills enhancement students typically enroll in state-supported courses to meet their upgrading needs. Their approach to the college is much like a "commodity" purchase. That is, they enroll if the college has a product which they need at the time. The majority have used the college every few years to meet their upgrading needs. Most enroll part-time with nearly half taking classes only at night. The majority enroll without the direct support of employers. Just 27 received tuition reimbursement. Eleven percent enrolled in employer contracted courses.

- The vast majority of workers (88 percent) enroll in classes funded by tuition and state resources, not in employer funded courses.

- Workers take courses from across the whole curriculum including math, English, psychology and foreign language as well as occupationally specific courses.

- Workers were satisfied with the quality of training and the resources provided to support training.

- Some 35 percent of workers were dissatisfied with the availability of classes they need for upgrading. While the majority were satisfied with advising assistance related to course selection, 30 percent see a need for improvement in that area as well.

- The number of workers enrolled in job skill enhancement college-level classes has declined by 5 percent a year since the beginning of this decade. As of fall quarter 1995, some 24,000 workers are taking college-level courses to upgrade their job skills.

- The number of workers enrolled in job skills enhancement at the pre-college level has grown by five percent a year, but there still is a need to increase service. Basic skills enrollment of workers represents 10 percent of the upgrade training - about 2,500 students in colleges. Currently a unit record database does not exist to provide a similar count for community based organizations which provide basic skills training. The State Literacy Survey (SALS) found that 57,000 employed adults needed such training as they scored at the first or second skill level in the SALS. This difference between the number now enrolled and the need represents a substantial opportunity to increase service.

- The typical $11 an hour post-training wage earned by workers upgrading at the college-level and the $8 an hour at the basic skills level cannot be attributed as a value-added by the program. These post-training wages reflect background characteristics of students rather than the impact of recent training at the college. For this reason, wage data, though included in the report, are not presented as a measure of the programs outcomes.

Policy Implications

Job skills enhancement students, especially those who enroll in college-level courses, represent life long learners who use the college and other training resources as a means to increase their satisfaction with their own work performance or increase their opportunities for better work assignments. Workers rate their college experience positively.

The state can assure that colleges can effectively meet the needs of more workers while at the same time assuring continued focus on meeting job preparatory and transfer demands by:

- Finding new funding sources to increase the availability of evening and flexible enrollment courses at the colleges.
- Continuing to invest in a technology infrastructure which will provide access in flexible formats for working adults.
- Developing a mechanism for on-going "customer" feedback related to course variety, quality of instruction and extent to which incumbent workers are satisfied with college instruction.

While colleges have been increasing their service to workers at the basic skills level, there is considerable opportunity to provide more service. The following strategies can address the needs of workers at the basic skills level:

- Colleges can recruit from underrepresented industries: manufacturing, government, personal services, finance, construction, transportation, and utilities.
- Since 27 percent of the basic skills upgrading students work for the larger employers, those employers could work with basic skills programs to develop work-based basic skills training at the employer work site.
- Smaller employers and labor groups representing the agriculture, business, social and health services, and sales industries could form consortiums for the purposes of sponsoring industry-based basic skills training even though too few students from a single employer are enrolled to provide work-site training.

Colleges could better meet needs of those seeking to enhance their work skills by:

- Providing better advising for workers.
- Gathering "customer feedback" related to course variety, quality of instruction and extent to which workers are satisfied with their college instruction.
- Targeting workers in all industry areas, not just the service industries, which is the focus at present.
- Increasing employer contract funded training.

Evaluation Issues and Approach

This report meets the requirements of Senate Bill (SB) 5992 for "biennial program evaluations" by "operating agencies." The Washington State Board for Community and Technical Colleges (SBCTC) conducted this research to provide data of use in directing the future of community and technical college training for employed workers. This report serves to focus attention both for those workers who enroll to upgrade skills at the college-level and those in pre-college adult basic education or English as a Second Language programs. A more comprehensive study would have included data on basic skills worker training provided by community based organizations. The data systems necessary for such analyses have just recently been developed. While future studies will be advantaged by inclusion of these programs, this report is necessarily limited to training within the community and technical college system.

Several factors combine to make incumbent worker training the focus of this first biennial evaluation report:

- Service to workers in college-level courses has declined throughout the 1990s. Part of that decline reflects the impact of the Baby Bust - the declining size of the population now in their 20s. Much of the decline, however, represents a shift of college resources to meet the demand for more job preparatory and transfer training.
- The Workforce Training and Education Coordinating Board (WTECB) staff have reported an increased need for job skills enhancement training. A comprehensive understanding of the nature of upgrade training will facilitate the development of policy needed to best respond to that need.
- The literature on basic skill training suggests that better retention of students results when basic skills training is offered in a specific context such as the family or work environment. While many basic skills students are not in the workforce, policy makers would be aided in directing resources to working students by knowing more about their employment status.

"Job skills enhancement students" refers to employed adults enrolled in courses to upgrade their current job skills. Some workers enroll in college for the purpose of making a career change[2]. These job preparatory working adults are not included in this analysis. Their outcomes were examined by the WTECB staff as part of their review of programs under SB 5992. Even though some enrolled workers are excluded from this analysis because they are considered job preparatory, the term "worker" will be used in this report as synonomous with "job skills enhancement students."

Workers typically enroll part-time and may take a single course rather than pursue a program of study.

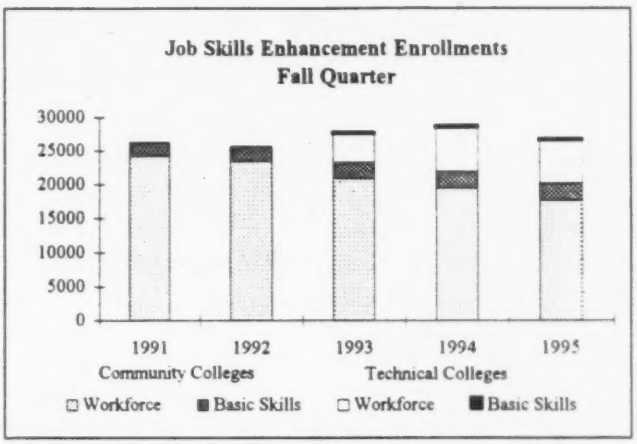
[2] While most students can be clearly identified as either job preparatory or upgrading, a gray area exists for some students. SBCTC arbitrarily categorizes students in the gray area as upgrading if they fail to declare a major and if their college codes them as other than job preparatory.

This report summarizes research conducted over the past five years. The wage and employment outcomes data was gathered in fall 1993[3] and analyzed this past spring. Data sources include:

- In-class survey of 1,151 upgrading students at eight representative community colleges, conducted in November 1990 (Nolte).
- Focus group interviews with workers enrolled to upgrade job skills at six community colleges in spring 1990 (Borton).
- Match between college records and the Unemployment Insurance system wage records for all 13,200 upgrading students who left the college during the 1991-92 academic year (Simmons) and of all respondents from the sample survey.
- Enrollment records for all upgrading students from fall quarter 1990 to fall 1995.

Summary of Findings

Trends in College Provided Job Skills Enhancement Training: In fall 1995, 26,721 workers enrolled to improve their job skills. They represented 12 percent of the total enrollment for fall, down from 16 percent of total in fall 1990. Ten percent of that group was enrolled in basic skills instruction - literacy training for those with less than 9th grade skill levels or English as a Second Language instruction. The other 90 percent were enrolled in a wide variety of college level courses or a combination of developmental and college-level courses.

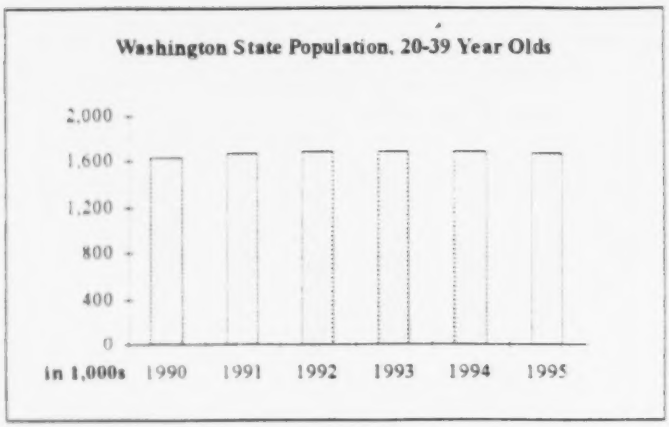


Compared to six years ago, community colleges served 4,500 fewer workers in fall of 1995. All of that decline has been in college-level instruction. The basic skills effort for workers has grown about five percent a year over the same period. This decline is due almost entirely to factors impacting the colleges' ability to meet the demands of the community.

Throughout the 1980s and 1990s the demand for spaces at community and technical colleges has exceeded the resources needed to meet the demand. As a consequence colleges have had to make difficult choices, not offering some classes so that other courses meeting other needs could be offered. As a result of these choices, the opportunities for worker training have declined.

[3] These data were for workers leaving the colleges during the 1991-92 academic year. As this was the first year that technical colleges formed part of the new system, wage and employment data for those colleges are not included.

There has been little change in demand for upgrade training. The pool of 20 to 39 years of age group most likely to enroll to upgrade job skills has stayed about the same size since 1990. While employment rates have varied for this group, the pool of employed 20 to 39 year olds has also remained fairly constant. Thus the fall-off in worker enrollment is not due to shifting population dynamics, but shifting priorities at the college.



Colleges likely could have maintained worker enrollments at 30,000 (estimate for community and technical colleges combined in 1991) if funds to pay instructors' salaries had not been needed to meet the demand for increased job preparatory training, transfer education and basic skills training or to meet the needs of dislocated workers.

Characteristics of Enrolled Workers: Workers who take classes at the college tend to be in their late 20s and early 30s. Most of those upgrading skills in college-level courses are women, but men are in the majority among workers in basic skills classes. Being older, more than a third of these students were parents with dependent children in addition to being workers and students. Those taking college-level classes were a well educated group with 65 percent having been to college. Some 15 percent of basic skills students also had been to college, including those who attended college in another country before immigrating to the United States.

Enrolled Worker Characteristics

	College-Level	Basic Skills
Median Age	31	28
Age 25 and Older	68%	65%
Women	56%	43%
Of Color	11%	44%
Single Parents	8%	9%
Couple with Children	29%	44%
Previously Took Some College	65%	15%
AA Degree or Higher	24%	0%

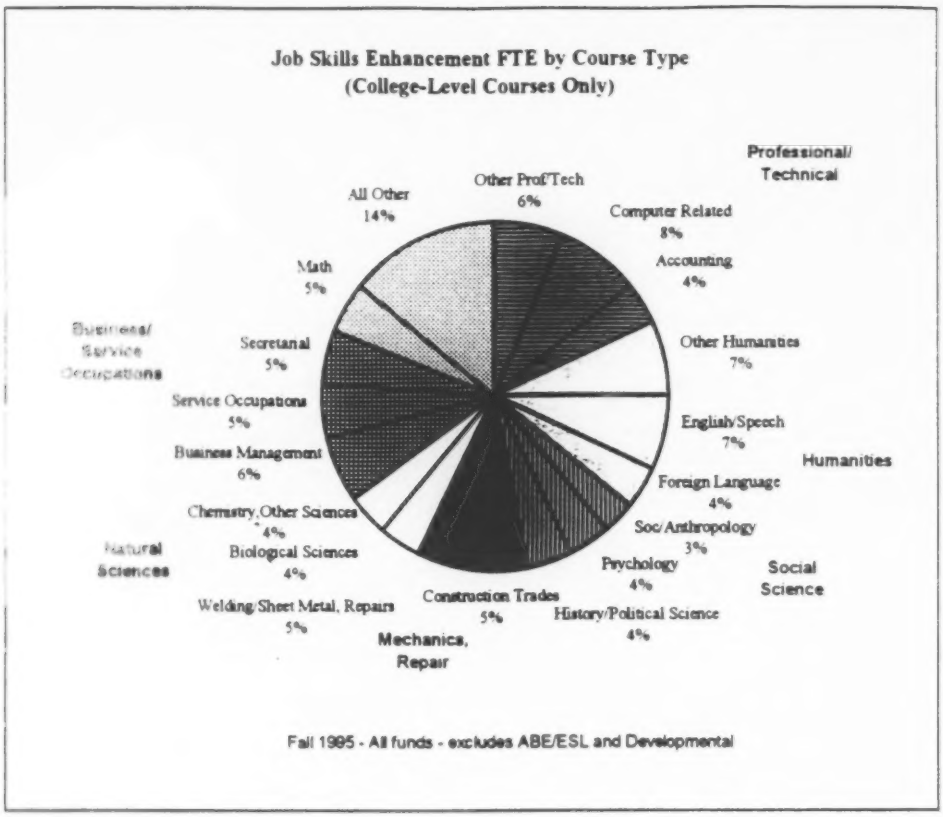
In fall 1995, most job skills enhancement basic skills students enrolled for their first time or had started college just recently. Those taking college-level courses, on the other hand, exhibited an ongoing relationship with the college. The majority had taken classes some time ago in addition to the class or classes taken in fall 1995. Some 16 percent had taken classes some 10 or more years ago. Workers appear to be lifelong learners who return to the college periodically to upgrade skills or meet personal interests.

Worker Enrollment Pattern

	College-Level	Basic Skills
Time of First Enrollment		
Last 2 Years	40%	63%
3-4 Years	14%	12%
5-9 Years	20%	11%
10 or More Years	16%	4%
Enrolled Part-Time	75%	72%
Enrolled at Night	54%	52%
Enrolled off Campus	20%	25%
Took Vocational Courses	59%	
Took Academic Courses	49%	
Took Below College Courses	6%	100%
Employer Contracted Courses	11%	NA
State or Student Funded Courses	89%	NA

Just over half the workers enrolled at night. Nearly half took at least one academic course, though the majority took a vocational class. About 6 percent of college-level workers took at least one developmental studies class (below college-level) along with college-level classes.

While 59 percent of all students enrolled in some vocational classes, the FTE generated in academic classes – taken alone or along with vocational classes - was substantial. Workers operate in all kinds of contexts and thus need all kinds of upgrading. Some workers, for example, teach music for a living, so it is not surprising that part of the humanities FTE included music performance classes such as community band or choir (typically offered to the community on a self-supporting basis). Spanish language skills are needed by many workers, and thus foreign language courses, mostly Spanish, comprise 4 percent of the FTE taken by these workers in fall 1995. Many workers seek to better understand the social and personal forces that impact the work world and thus enroll in psychology, sociology and political science classes. Some workers need to enhance their understanding of chemistry, the biological sciences and math, thus each area represents 4 percent of the FTE.



Among occupationally specific courses, the largest single area of study was in computer related courses at 8 percent of the FTE. The secretarial, business management, various professional/ technical areas including health fields, and construction trades each accounted for 5 or 6 percent of the FTE. It is clear then that no one area of study dominates the interest of job skills enhancement students. They are enrolled in all areas of the curriculum.

The median earnings of those who enroll for upgrade training was $10.81 for those in college-level programs and $7.93 for those in basic skills. Most worked in smaller companies, with more than one-third working in firms of fewer than 50 employees. Some 32 percent of college-level workers were from firms with 500 or more workers, compared to 27 percent of the upgrading basic skills students.

The following hypothetical student profiles based on the focus group interviews (Borton) and college enrollment records help clarify the diversity among workers enrolled at the college.

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Marian, a 28 year-old white female, has been working as a full-time personnel assistant with a mid-sized family clinic for the past five years. Before enrolling at her current college in fall 1994, Marian had already taken some courses at a business college. In fall 1994 she was enrolled in an evening five credit state-supported vocational course in personnel management. Marian did not receive any need-based financial aid nor was her tuition reimbursed by her company.

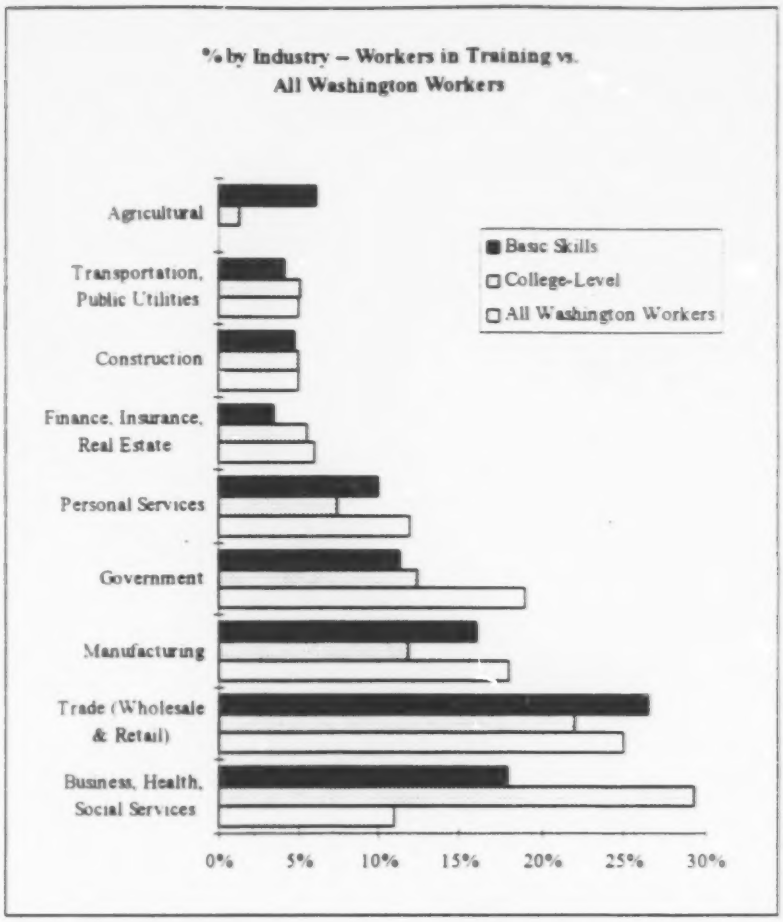
Marian is uncertain whether she will continue at the college after fall term. She worries about meeting her family obligations, working and being a student. She has limited time to study at night or on the weekends. Assignments that require library work are especially difficult for her. Despite being successful at the business college she attended, she is now concerned about failing her course because of the number of years since she was last in school. Marian expects that her current employer will reward her training effort with a salary increase.

Rex, a 35 year-old white male, works full-time for an electronics manufacturing firm that employs about 170 people. He is taking a night time vocational course to upgrade skills at his current job. After completing the course, he does not plan to return to the college for several years. He figures that his current course work will increase his productivity, a high priority for his current employer. Rex's employer is paying for his course, provided he achieves at least a C grade.

If Rex could change one thing about taking courses at the college, he would change the time and place of his course. Since the course will benefit his company as much as himself, he thinks the course should be offered during work hours at his job site.

Craig works full-time at a small restaurant with fewer than 20 employees. He has been working there for two years. He likes the contact with customers at his current job but is unhappy with the evening and weekend work schedule. Craig is single, white, and in his late twenties. Craig started taking basic skills classes in fall 1990. He plans to take courses again at the college in winter and spring quarters and to pass his GED. Craig expects that this course may help in seeking a higher paying job. Even more importantly, he expects a new job will allow him more leisure time than his current employment. Craig paid the cost of attending himself without aid from the college or his company.

The workers who enroll in college for their upgrade training represent a different profile than the typical worker by industry. Workers in basic skills programs differ from those in college-level training. The job skills enhancement basic skills students were over-represented in agriculture, business, health and social services, and sales. College-level students were over-represented in only one area - business, health and social services.



Clarifying Assumptions About Job Skills Enhancement Worker Training: Some of the widely held beliefs about worker training at community and technical colleges are not substantiated by the data. Specifically, the following conclusions stem from the data and contradict common assumptions:

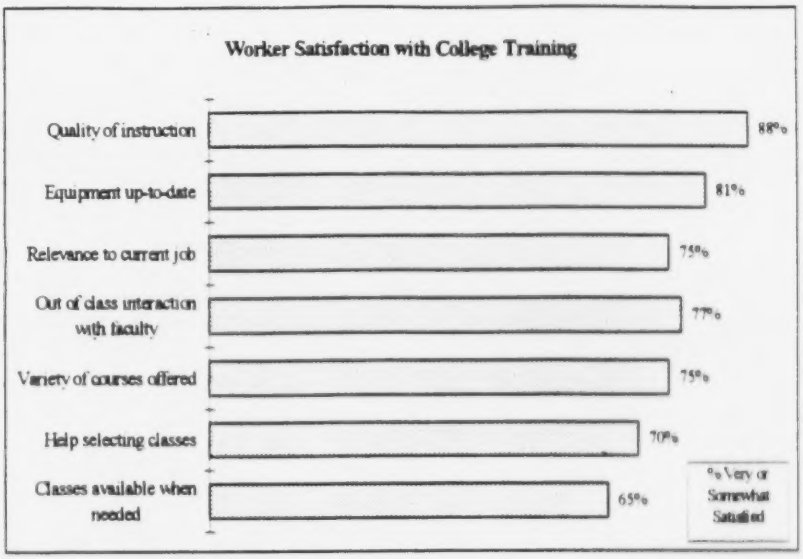
Common Assumptions	What the Research Tells Us
Employers sponsor most worker course taking.	Upgrading students enroll primarily without the benefit of employers sponsorship either through course contracting or through tuition reimbursement. Just 27 percent of workers receive tuition support from their employer. Another 11 percent enroll in employer contracted courses.

Common Assumptions	What the Research Tells Us
Working adults enroll in night time vocational courses	Upgrading students enroll during the day as well as at night and in academic courses as well as in courses specifically designed for upgrading in specific occupations. Some 46 percent enroll during the day and 49 percent take at least one academic course.
Working adults get their training from a single provider, in this case the college.	Workers use colleges as just one of several sources of continual training. For the majority, the college courses are not their only source of training. Two-thirds of workers had also participated in training other than that offered by the college including courses at other colleges, privately offered training, and employer training.
The beginning and end of upgrade training can be identified for use in performance assessment.	Upgrade training is undertaken as a continual process. The notion of "starting" training and "completion" do not apply. The students return to college on an as needed basis. Evaluation based on an assumption that a point in time can be defined as the pre-training or post-training period does not correspond to the actual behavior of workers.

Outcomes Assessment: Customer satisfaction surveys are an appropriate component in any performance assessment system, but they are especially central to assessment of college services to workers. Working adults report that they expect the benefits of training to be in areas best assessed by use of a satisfaction survey. The top benefits of training listed by workers were:

Personal satisfaction	79%
Increased job responsibility	69%
Increased salary	68%
Increased job security	63%
Improved quality of life	61%

Job skills enhancement students reported a high level of satisfaction with the training provided at the colleges. Some 90 percent would recommend the college to a friend or co-worker. The satisfaction ratings were highest for the quality of instruction and the access to up-to-date equipment and lowest for availability of courses and help with selecting courses.



Given the cost of post-training survey work, SBCTC has not conducted a study that could reveal valuable information about the extent to which training led to the expected outcomes of increased job responsibility, job security and improved quality of life as well. Such data collection is needed periodically.

SBCTC staff undertook this analysis with the goal of reporting post-training earnings as one of the outcomes measures for job skills enhancement training. However, an analysis of factors which contribute toward explaining differential earnings of former students found the extent of upgrade training to be an unimportant factor. Key factors impacting post-training wage levels, in order of importance, are age, gender and education level prior to training (see Appendix B). The extent of this relationship can be seen by comparing wages increase with prior education levels for college-level job skills enhancement students.

Post Training Wage Group by Prior Education of Incumbent Workers (College-Level)

Wage Group	Below HS	GED	High School	Post HS+	Certificate	AA	BA
$15/ Hour+	11%	17%	16%	28%	30%	38%	49%
$10-14.99	24%	33%	24%	33%	38%	33%	33%
$6.50-9.99	27%	33%	35%	28%	23%	22%	16%
$6.49/Less	38%	16%	24%	11%	9%	6%	2%

This finding implies that the value-added by college attendance cannot be measured by post-training earnings. Given the finding that such earnings relate not to training but to "environmental" factors, wage data reported here are not regarded as an outcome of the training.

It is possible that a pre/post wage comparison could yield a differential wage gain for those with more hours in upgrade training. This is not a strong possibility, however, given the strength of the association between post-training wage and age and education level at the time training "started."

Policy Implications

Colleges provide one of many sources of quality upgrade training for workers and should continue to be funded to provide such training. These life long learners rate their college experience positively.

The outcomes indicator ranked by workers as most important was personal satisfaction. Such an outcome can best be measured by consumer satisfaction surveys. A system for worker surveys needs to be developed. Other than the in-class survey described here, no systematic effort has been made by SBCTC or the WTECB to conduct direct customer satisfaction surveys related to the incumbent worker training mission. The WTECB has conducted employer satisfaction surveys related to those workers who participate in employer-contracted courses. Given the life-long learning approach of workers, they could be surveyed immediately after a course ends. There is no need to wait to learn if the student has "left" the college in the next term as is the protocol for job preparatory surveys.

While colleges have been increasing their service to workers at the basic skills level, there is considerable opportunity to increase that level of service. Most of the job skill enhancement basic skills students (73 percent) work for smaller firms of fewer than 500 employees. In fact, 38 percent work in firms with fewer than 50 employees. Colleges could work with employers and labor groups to form a consortium representing the agriculture, business, social and health services, and sales industries for the purposes of sponsoring industry-based basic skills training. Since there are too few students from a single employer enrolled to provide work-site training, these consortium could provide training in an industry environment instead. For the 27 percent of students working in large companies with 500 or more employees, the college and employers could work together to provide work-based basic skills training at the employer work site. Basic skills outreach could also be extended to industries other than agriculture, business, social and health services, and sales, which are now over represented in the basic skills enrollment.

New funding sources may be needed if colleges are to continue to meet job preparatory and transfer demands while also effectively meeting the need to serve more, not fewer, workers. With additional funding colleges could increase the availability of evening and flexible enrollment courses. The state's continued investment in an electronic infrastructure which will allow enrollment in more flexible formats for working adults is also critical.

Colleges could better meet worker needs by providing better advising and targeting workers in all industry areas, not just the service industries, as is the focus at present. Just as the state needs to develop a systematic way of gathering "customer feedback" related to job skills enhancement

training, colleges could improve their programs by doing so also. The consumer surveys should focus on the issues of importance to students: course variety, quality of instruction and extent to which workers are meeting their needs via college instruction.

While administrative data linking is an inexpensive way to gather outcomes data, post-training data are not shown to be useful for evaluating this mission of the college.

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Appendix A
Community College Job Upgrading/Retraining Survey, November 1990

As part of his dissertation study, Walt Nolte designed and administered The Community College Job Upgrading/Retraining Survey in November of 1990. The survey results, along with demographic information from the SBCTC Student Management Information System, provided the basis for the profile of upgrading students and the student evaluation of the expected outcomes and satisfaction with community college education.

Questionnaire

The eight page questionnaire was designed based on previous SBCTC survey instruments, a literature review, and results from the Nancy Borton study (Borton, 1991). The questionnaire was pilot tested with a group of employed students at Tacoma Community College. The final instruction took about 15 minutes to complete and was administered during the class session by staff hired specifically for that purpose.

A copy of the questionnaire is attached. The main areas covered in the instrument were:

Reasons for enrolling
Reasons students enrolled at a community college
Expected outcomes from courses
Barriers to enrolling
Measures of student satisfaction
Comparisons with other training experienced
Future needs related to training
Current job status
Tuition reimbursement status
Relationship of salary and work

No background questions were asked because it was expected that such information could be obtained from matching survey responses with data collected at registration. Students were advised, both in writing and orally, of this use of the social security number they provided on the questionnaire at the time of the administration of the survey.

Survey Sample Frame

The sample for this survey was drawn from all students enrolled in courses identified as serving employed students. From six to twelve classes were identified for the sample by administrators at eight community colleges:

Big Bend Community College
Edmonds Community College
Highline Community College
North Seattle Community College
Skagit Valley Community College
South Puget Sound Community College
Spokane Community College
Tacoma Community College

Each college has a history of providing educational services to employed students and a reputation for providing services to private sector business and industry. These colleges represent the mix of all community colleges in terms of urban, suburban, and rural settings, size, and location.

Each college was asked to survey 125 students, but due to differences in the size of colleges, the responses by college generally exceeded this norm. Administrators were aided in the course selection by a computer program which pulled student characteristics information and displayed the courses most likely to contain upgrading and retraining students. The program also provided information on the mix of such courses in terms of day versus evening, and vocational, academic or basic skills mix.

Administration

Staff at each of the eight colleges administered the surveys to 1,151 students during the sixth through the eighth week of fall quarter 1990. Campus staff followed a common procedure to contact the faculty and gain agreement to use class time for the survey. A single individual administered all surveys and used a prepared script to announce the survey process and answer common questions. Only those students who said they were employed and enrolled to improve their job skills or prepare for a career change were asked to complete the questionnaire.

Students who wanted a copy of the survey results were asked to stop by the Dean's office in June of the coming year to obtain copies.

SBCTC staff completed data entry of all surveys using a locally designed data entry program which disallows responses outside the range of those allowed on the questionnaire.

Additional Data

In addition to survey results, the analysis of upgrading and retraining students was partly based on data from two other sources:

- Information provided by survey respondents at the time of registration. This information included student purpose for attending, planned length of enrollment, current job status, race, gender, and types of courses in which the student enrolled.

- Information on student job status as of four months earlier related to an estimated annual salary and hours of work based on a match of social security numbers with the unemployment insurance data files maintained by the Washington State Employment Security Department.

Data from both sources were matched to the survey responses using the social security numbers provided by survey respondents. The survey form included an explanation of the use that would be made of the social security number if provided. Of the 1,151 students who completed the survey, 109, or 9.5 percent, left the social security number blank. Additionally, 84 provided numbers that did not match with the registration data. Thus the above data were not available for 17 percent of the survey respondents.

Defining the Degree of Certainty in Using these Survey Findings

Factors Influencing Certainty of Findings

All surveys have some degree of uncertainty - that is the concern that findings do not represent the beliefs, attitudes, opinions or behaviors of the population studied. If uncertainty is low, the findings are far more useful. For many the first and only factor that comes to mind when considering the degree of certainty attached to findings from a survey is sampling error. Sampling error refers to the degree to which the sample represents the total group or population for which information was sought. But there are three other factors which are important in determining the degree of certainty of survey findings:

- Measurement Error: The degree to which the questions asked truly measures what the researcher intended.
- Non-Coverage: The degree to which the entire population had an opportunity to be included in the sample.
- Non-Response Bias: Bias created if the answers from non-respondents were likely to differ considerably from respondents and the number of non-respondents was large enough to impact the findings.

Researchers attempt to control the four factors mentioned above to assure the highest level of certainty possible given the resources available to conduct the survey.

In the case of this study, findings from The Job Upgrading/Retraining Survey are regarded as fairly high in certainty because the researchers were able to minimize bias and error. Nevertheless, some uncertainty remains due primarily to sampling error and non-coverage.

Measurement Error

The following factors helped reduce uncertainty regarding measurement:

- Nolte had extensively pilot-tested the questionnaire with students at his community college.
- The questionnaire contained mostly standard questions which had been previously pilot-tested and used in a variety of other settings.
- Some questions were asked in several ways.
- The survey was short and well structured.
- Respondents did not have to work hard. Their interest was maintained as they were led through the survey.

For some questions, respondents were asked to indicate if each response did or did not apply to them. Often a response was left blank. Analysis of this survey assumed a blank response to mean

"does not apply". (If this assumption is false, the level of measurement error could be considerable.)

Sampling Error

Courses were used as a basis for sampling students. How well these students represented all upgrading and retraining students depended on the courses selected. Deans of instruction or vocational deans at each campus selected courses which they regarded as representative of courses where upgrading and retraining students were most likely to enroll. Course profile data was provided to assist the deans in their selection. While this selection process was not as free from error as random selection, it is assumed that the judgments made resulted in minimal error.

The course-based cluster sampling technique does not allow for exact specification of sampling of error. Based on sample size and assumed representative courses, the sampling error is assumed to be not greater than plus or minus five percent.

Non-Coverage

Not all upgrading and retraining students had an opportunity to be in the survey sample and thus there is uncertainty in the findings due to non-coverage. Specifically, those that did not have an opportunity to be in the sample included:

- Any student in a selected course when the faculty could not afford 15 minutes of class time to administer the survey.
- Upgrading and retraining students in the following courses:
  English as a Second Language (ESL)
  Adult Basic Education (ABE)

  These students were excluded because of the reading skill required to complete the survey. Students in developmental studies courses were included, however, and the results can be said to fairly represent upgrading and retraining students above the literacy training level.

- Upgrading and retraining students in colleges not included in the study. It was assumed that the participating colleges adequately represented the community college system.

For some analysis, findings were based on a combination of survey data and registration data. SBCTC matched the two sources of data based on social security numbers supplied by respondents. Not all students supplied their social security numbers. Thus findings based on registration and survey data can be regarded as high in certainty only for those who supplied their social security numbers.

Non-Response Bias

In this study, the non-response rate is unknown as the number of upgrading and retraining students in each course was unknown. Students in the course were asked orally and at the start of the survey to determine if they qualified to complete the survey. Only those who said they were

currently employed and enrolled to improve their job skills or prepare for a career change were asked to complete the survey. It is possible that some who qualified did not respond. It is also possible that some non-qualifying students completed the survey.

Non-response may have also resulted from upgrading and retraining students not being in class on the day of the survey. Given the timing of the survey early in the quarter and the ease of completing the instrument, it is likely that most upgrading and retraining students were present and most responded to the survey. Thus this in-class survey, like most of that type, probably had considerably less non-response bias than mail or phone surveys of similar populations.

Conclusion

The findings of this survey can be thought of as fairly accurate in representing the opinions, beliefs, attitudes and behaviors of upgrading and retraining students above the literacy training level in Washington community colleges.

COMMUNITY COLLEGE

JOB UPGRADING/RETRAINING

SURVEY

November 1990

Washington Community Colleges:

The
Smart
Investment

JOB UPGRADING/RETRAINING SURVEY

Are you currently employed? Are you enrolled in college to improve your job skills or prepare for a career change? If your answer to both questions was YES, we would appreciate your help by completing this survey about students enrolled to improve job skills.

Your answers are a valuable source of information to help Washington community colleges improve instruction and support services for working students. Your social security number is needed to match to the demographic information you have already provided the colleges. Your responses will remain confidential.

Name (optional): _____

Social Security Number: _____-_____-_____

Q-1. How would you describe your course(s) in relation to your current job? (Circle the number that best applies to you--one only.)

1 STRONGLY RELATED TO JOB
2 SOMEWHAT RELATED TO JOB
3 NOT RELATED TO JOB
4 UNCERTAIN

Q-2. Which of the following apply to you as a reason for enrolling at your community college?

		Applies	Does Not Apply
		1	2
1	TO TAKE COURSES RELATED TO CURRENT JOB	1	2
2	TO PREPARE FOR A NEW JOB AT EXISTING PLACE OF EMPLOYMENT	1	2
3	TO PREPARE FOR A NEW JOB AT ANOTHER PLACE OF EMPLOYMENT	1	2
4	TO PREPARE FOR A CAREER CHANGE	1	2
5	TO EXPLORE A NEW CAREER DIRECTION	1	2
6	TO PREPARE FOR INCREASE IN JOB COMPLEXITY	1	2
7	TO MOVE FROM TEMPORARY WORK INTO A PERMANENT CAREER	1	2
8	OTHER _____ (Please specify)		

Q-3. Are there changes in your place of employment requiring you to upgrade or retrain?

		Applies	Does Not Apply
		1	2
1	NO CHANGES	1	2
2	COMPANY IS BEING EXPANDED	1	2
3	COMPANY IS BEING DOWNSIZED OR LIQUIDATED	1	2
4	COMPANY HAS BEEN ACQUIRED OR MERGED	1	2
5	CHANGE IN MAJOR CUSTOMERS	1	2
6	CHANGE IN MAJOR PRODUCTS OR SERVICES	1	2
7	CHANGE IN COMPANY OWNERSHIP OR MANAGEMENT	1	2

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		Applies	Does Not Apply
		1	1
8	INCREASED COMPETITION FROM OTHER FIRMS	1	2
9	CHANGES IN COMPANY TECHNOLOGY	1	2
10	CHANGES IN COMPANY LOCATION	1	2
11	COMPANY IS BEING CLOSED AND NO OTHERS REQUIRE MY SKILLS	1	2
12	COMPANY'S MAJOR CUSTOMER(S) REQUIRES TRAINING AT OUR FIRM	1	2
13	OTHER _____ (Please specify)		

Q-4. Why did you decide to go to this community college?

		Applies	Does Not Apply
		1	1
1	TYPE OF COURSES AND PROGRAMS	1	2
2	RECOMMENDED BY EMPLOYER	1	2
3	RECOMMENDED BY CO-WORKERS	1	2
4	CONVENIENT LOCATION	1	2
5	CONVENIENT COURSE TIME	1	2
6	AFFORDABILITY	1	2
7	OTHER _____ (Please specify)		

Q-5. What are your future expectations regarding your current or planned course(s)?

		Applies	Does Not Apply
		1	1
1	INCREASED JOB SECURITY	1	2
2	INCREASED JOB RESPONSIBILITY	1	2
3	INCREASED SALARY	1	2
4	NEW POSITION AT EXISTING PLACE OF EMPLOYMENT	1	2
5	NEW POSITION WITH ANOTHER EMPLOYER	1	2
6	START OWN BUSINESS OR PRACTICE	1	2
7	IMPROVED QUALITY OF LIFE	1	2
8	PERSONAL SATISFACTION	1	2
9	BETTER LIFE FOR CHILDREN	1	2
10	OTHER _____ (Please specify)		

Q-6. Based on what you have learned in your classes so far, do you think your community college experience will help you meet these expectations?

		Applies	Does Not Apply
		1	1
1	YES, IMMEDIATE BENEFIT	1	2
2	YES, LONG TERM BENEFIT	1	2
3	INDIRECT BENEFIT	1	2
4	NO BENEFIT	1	2
5	UNSURE	1	2

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Q-7. How much impact do you expect your community college experience to have on your wages? (Circle the number that best applies to you--one only.)

1 LARGE INCREASE
2 SMALL INCREASE
3 NO INCREASE
4 DECLINE
5 UNCERTAIN

Q-8. Did you have to overcome any of the following to enroll in community college?

	INSTITUTIONAL BARRIERS	Applies	Does Not Apply
		↓	↓
1	DIFFICULTY IN SCHEDULING COURSES AND WORK	1	2
2	EMPLOYER'S TRAINING AND EDUCATION POLICIES	1	2
3	INCONVENIENT LOCATION OF COURSES	1	2
4	LACK OF RELEVANCY OF COURSES	1	2
5	INCONVENIENT LENGTH OF COURSES (WEEKS, MONTHS, QUARTERS)	1	2
6	INCONVENIENT TIME OR DAY OF COURSES	1	2
7	LACK OF COLLEGE SUPPORT SERVICES (ADVISING, COUNSELING, ETC.)	1	2
8	DIFFICULT REGISTRATION PROCESS	1	2
9	LACK OF KNOWLEDGE ABOUT COURSES AND PROGRAMS	1	2
10	COLLEGE PLACEMENT TESTS	1	2
11	COURSE PREREQUISITES	1	2
12	OTHER _____ (Please specify)		

Which barrier was the greatest problem for you? _____ (Number from above)

Q-9. Did you have to overcome any of the following in order to attend community college?

	PERSONAL BARRIERS	Applies	Does Not Apply
		↓	↓
1	LACK OF CONFIDENCE	1	2
2	FEAR OF FAILURE	1	2
3	FEELING OF BEING TOO OLD	1	2
4	LACK OF PERSONAL INTEREST	1	2
5	FAMILY RESPONSIBILITIES	1	2
6	LACK OF SPOUSE OR FAMILY SUPPORT	1	2
7	FEAR OF TRYING SOMETHING NEW	1	2
8	PHYSICAL DISABILITIES	1	2
9	CHILDCARE	1	2
10	FINANCES	1	2
11	TRANSPORTATION	1	2
12	OTHER _____ (Please specify)		

Which barrier was the greatest problem for you? _____ (Number from above)

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Q-10. In general, how satisfied are you with your community college with regard to each of the following areas?

		Very Unsatisfied	Somewhat Unsatisfied	Somewhat Satisfied	Very Satisfied	Does Not Apply
		1	1	1	1	1
1	QUALITY OF INSTRUCTION	1	2	3	4	5
2	HELP WITH SELECTING COURSES	1	2	3	4	5
3	INFORMATION ON CONDUCTING A JOB SEARCH	1	2	3	4	5
4	VARIETY OF COURSES OFFERED	1	2	3	4	5
5	USEFULNESS OR RELEVANCY OF TRAINING TO CURRENT JOB	1	2	3	4	5
6	AVAILABILITY OF CLASSES AT THE TIMES I COULD ATTEND	1	2	3	4	5
7	INTERACTION WITH FACULTY OUTSIDE OF THE CLASSROOM	1	2	3	4	5
8	ACCESS TO UP-TO-DATE EQUIPMENT	1	2	3	4	5
9	SERVICES FOR DISABLED	1	2	3	4	5
10	TESTING OR ASSESSMENT SERVICES	1	2	3	4	5
11	FINANCIAL AID	1	2	3	4	5

Q-11. Based on what you have learned in your course(s), do you expect your community college experience to increase your on-the-job productivity?

1 YES (go to Q-12)
2 NO (skip to Q-13, next page)
3 UNSURE (skip to Q-13, next page)

Q-12. Will your work productivity be increased in the following areas?

		Applies	Does Not Apply
		1	1
1	ABILITY TO WORK "SMARTER NOT HARDER"	1	2
2	ABILITY TO WORK WITHOUT ERRORS	1	2
3	ABILITY TO WORK BETTER WITH CO-WORKERS	1	2
4	BETTER KNOWLEDGE OF JOB RESPONSIBILITIES	1	2
5	ABILITY TO WORK AS A PART OF A TEAM	1	2
6	ABILITY TO WORK WITH LESS SUPERVISION	1	2
7	ABILITY TO SUPERVISE OTHERS BETTER	1	2
8	SHORTER TURN-AROUND TIME OF PRODUCT OR SERVICE	1	2
9	ABILITY TO BE CREATIVE, FLEXIBLE, OR PROBLEM SOLVE	1	2
10	ABILITY TO READ AND WRITE EFFECTIVELY	1	2
11	ABILITY TO LEARN NEW SYSTEMS OR PROCEDURES	1	2
12	ABILITY TO MAKE PRESENTATIONS	1	2
13	ABILITY TO USE MATH AT WORK	1	2
14	ABILITY TO MAKE DECISIONS INDEPENDENTLY	1	2
15	OTHER _____ (Please specify)		

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Q-13. Other than high school, have you been involved in other training and education programs?

1 NO (skip to Q-15)
2 YES

Q-14. If you have been involved in other training and education programs, how would you compare your experience to the community college? (Select 4 if you had not participated or cannot compare the item.)

		Community college experience was:			
		WORSE	ABOUT SAME	BETTER	DOES NOT APPLY
		1	1	1	1
1	EMPLOYER SPONSORED TRAINING	1	2	3	4
2	MILITARY	1	2	3	4
3	PRIVATELY SPONSORED SEMINARS AND WORKSHOPS	1	2	3	4
4	FORMAL EDUCATION	1	2	3	4
5	OTHER _____ (Please specify)				

Q-15. Do you see yourself as continually needing training in the future? (Circle the number that best applies to you--one only.)

1 YES, EVERY YEAR
2 YES, EVERY COUPLE OF YEARS
3 NO
4 UNCERTAIN

Q-16. Do you expect to attend to a four-year institution in the next five years? (Circle the number that best applies to you--one only.)

1 NO (skip to Q-18, next page)
2 NO, ALREADY HAVE A FOUR YEAR DEGREE (skip to Q-18, next page)
3 YES, TO WORK TOWARDS A FOUR YEAR DEGREE
4 YES, FOR CONTINUING EDUCATION
5 UNSURE

Q-17. If you expect to transfer, what institution do you plan to attend? (Circle the number of the institution that you are most likely to attend next--one only.)

1 THE EVERGREEN STATE COLLEGE
2 WESTERN WASHINGTON UNIVERSITY
3 CENTRAL WASHINGTON UNIVERSITY
4 EASTERN WASHINGTON UNIVERSITY
5 WASHINGTON STATE, MAIN CAMPUS

6 WASHINGTON STATE, TRI-CITIES
7 WASHINGTON STATE, VANCOUVER BRANCH
8 UNIVERSITY OF WASHINGTON, MAIN CAMPUS
9 UNIVERSITY OF WASHINGTON, TACOMA BRANCH
10 UNIVERSITY OF WASHINGTON, BOTHELL/WOODINVILLE BRANCH
11 PRIVATE COLLEGE IN WASHINGTON
12 OUT-OF-STATE

Q-18. What is your approximate start date at the 4-year institution? (Select one only.)

1 ALREADY ENROLLED
2 WINTER OR SPRING 1991
3 SUMMER OR FALL 1991
4 WINTER OR SPRING 1992
5 1992-93 ACADEMIC YEAR
6 1993-94 ACADEMIC YEAR
7 1994-95 ACADEMIC YEAR
8 NOT SURE

Q-19. Would you recommend the community college to your friends, co-workers, or acquaintances?

1 YES
2 NO
3 UNCERTAIN

Q-20. If you could go back, knowing what you now know, would you still attend this community college?

1 NO
2 YES
3 UNCERTAIN

Q-21. What is the title of your current job (also describe duties)?

TITLE_____

DUTIES_____

Q-22. How would you describe the level of your job in relationship to your skills? (Circle the number that best applies to you--one only.)

1 JOB IS DEFINITELY BENEATH MY SKILL LEVEL
2 JOB IS SOMEWHAT BENEATH MY SKILL LEVEL
3 JOB IS APPROPRIATE FOR MY SKILL LEVEL
4 JOB IS TOO ADVANCED FOR MY SKILL LEVEL
5 DON'T KNOW

Q-23. How many people are employed where you work?

1 FEWER THAN 20 STAFF
2 20 - 49 STAFF
3 50 - 249 STAFF
4 250 OR MORE STAFF

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Q-24. How long have you been employed at your current place of work? (Circle the number that best applies to you--one only.)

1 LESS THAN ONE YEAR
2 ONE TO THREE YEARS
3 FOUR TO FIVE YEARS
4 MORE THAN FIVE YEARS
5 DON'T KNOW

Q-25. What is the nature of the business of your current employer? (Circle the number that best applies to you--one only.)

1 AGRICULTURE, FORESTRY, OR FISHING
2 MINING
3 CONSTRUCTION
4 MANUFACTURING
5 TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, OR SANITARY SERVICES
6 WHOLESALE TRADE
7 RETAIL TRADE
8 BUSINESS, LEGAL, OR SOCIAL SERVICES
9 HEALTH OR EDUCATIONAL SERVICES
10 FINANCE, INSURANCE, OR REAL ESTATE
11 CONSUMER SERVICES
12 PUBLIC ADMINISTRATION
13 OTHER _____
(Please specify)

Q-26. Who paid the tuition or fees for the course(s) in which you are currently enrolled? (Circle the number that best applies to you--one only.)

1 100% EMPLOYER PAID
2 PARTIAL EMPLOYER PAID, PARTIAL SELF-PAID
3 100% SELF-PAID
4 COLLEGE FINANCIAL AID PROGRAM
5 SELF-PAID AND COLLEGE FINANCIAL PROGRAM
6 A COMBINATION OF SELF, EMPLOYER, AND FINANCIAL AID
7 OTHER _____
(Please specify)

Q-27. Did you receive financial assistance from any source for textbooks, supplies, or other educational costs?

1 YES
2 NO
3 UNCERTAIN

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Q-28. How would you describe your current salary in relationship to your work skills? (Circle the number that best applies to you--one only.)

1 SALARY IS DEFINITELY BENEATH MY SKILL LEVEL
2 SALARY IS SOMEWHAT BENEATH MY SKILL LEVEL
3 SALARY IS APPROPRIATE FOR MY SKILL LEVEL
4 SALARY IS SLIGHTLY MORE THAN MY SKILL LEVEL
5 SALARY IS DEFINITELY HIGHER THAN MY SKILL LEVEL
6 DON'T KNOW

Q-29. If your company has a tuition reimbursement program, please describe:

Q-30. Please use the space below to discuss the strengths or weaknesses of the community college programs and services.

Thank you for your assistance.

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Appendix B
Statistical Analyses of Impacts of Post Program Wage

Results of Discriminant Function Analyses of Wage Group Criterion

A. Accuracy of Predictions 87%

B. Specific Variables Predicting the Wage Group

	Criterion
Age	.73
Gender	.48
Previous Education Level	.39
Race	.05
Credit Level Earned	- 03
Wilks Lambda	.87

Hourly wage groups measured at 4 levels: (1=low - 4=high)

Codes for Variables:

Race: 1 = all non-white ethnicities; 2 = white
Gender: 1 = female; 2 = male
Age: 1 = under 25; 2 = 25-39; 3 = 40-54; 4 = 55 and over
Stucrlvl: 1 = 45 credits or less; 2 = more than 45 credits
Edu: 1 = non-h.s. & GED; 2 = h.s. diploma; 3 = some post high school & certificates;
4 = Associate's degree; 5 = Bachelors or more

Appendix C
Focus Group Interviews

As part of her dissertation study, Nancy Borton designed and implemented focus group interviews used as a data source in this study. She used an ethnography approach which seeks to make sense of "the whole" by studying the meanings people and organizations assign phenomena in a context.

Focus group data were collected from 52 students during February and March of 1990. Five to nine students participated at each of six sites. The sites, distributed geographically across the state, were chosen to represent a variety of community college variable factors (urban, suburban, and rural), (traditional college transfer, traditional vocational education, and comprehensive community), (small, medium, and large), (high technology, smokestack, agricultural), (local, regional, and international), and (geographically Eastern, Central, and Western Washington State). Members of the student focus group were chosen from students in academic, vocational preparation, vocational supplemental, and contractual classes who said they were in school to get a better job or to update their skills.

The focus group sessions lasted from two to two-and-one-half hours in length. A list of open-ended questions with follow-up probes was used as a guide to conducting and moderating the focus group discussions. The group discussions were tape recorded and typed verbatim. In addition, each focus group member filled out a supplemental survey providing demographic and background information.

Colleges provided Borton with the names and phone numbers of students who were in classes which had a high probability of containing incumbent workers.

She called persons on each of these lists to insure that there were at least 10 persons committed to participate in each group who met the qualifications. A telephone screen was used to assure that each informant met the qualifications. Persons chosen to be informants were sent letters with the details of the time, place, and a map or directions two weeks before the session. A phone call was made to each the day before the focus group to confirm their intentions to attend. It was assumed that 60-80 percent participation would be achieved so that there would be from 5-10 in each group. A total of 234 persons were called initially for the telephone screen and of that number 22 percent qualified and were able to participate.

An attempt was made to avoid choosing students who were from the same classes or programs so as to increase the diversity of novel answers and perspectives in the focus groups. The researcher achieved the targeted participation 92 percent of the time. A gift certificate of $25.00 redeemable in the college bookstore was offered to the students as a token of appreciation for their participation.

Borton developed three types of instruments for the focus group students. There was a preliminary multiple choice questionnaire used to probe and stimulate the thinking of the informants about the topic. It consisted of 12 multiple choice questions. It took about 5-10 minutes to administer and was completed at the beginning of the focus group sessions as people were arriving.

A consent form was developed for each group which passed inspection of the University of Washington Human Subjects Review Committee. These forms were used to obtain permission to use the data collected and to assure anonymity.

A focus group discussion guide was developed using information obtained from the literature review, and of naturalistic observations. The guide consisted of five open-ended questions with several follow-up probes for each question. These procedures were used for expansion of the range of the answer; to obtain more specificity; to go deeper into the affective, cognitive, or evaluative meanings of the answer; and to describe the personal context from which they came. Sometimes probes were used to test the strength and robustness of the response. Questions gradually focused in on the topic. One hypothetical situation was presented to each group to encourage answers from a variety of dimensions, to avoid implying answers or ways to respond, and to encourage answers based on the informant's own specific contexts. Brainstorming was used at the beginning of each focus group to obtain a breadth of responses, and projective techniques were used later in the group schedules to encourage depth in responses.

Borton used a computer program called ethnograph to analyze the transcripted interviews and the transcripted debriefing session between herself and the focus group monitor.

Student Focus Group Discussion Guide

Your participation in answering these questions is voluntary. You may choose not to answer any of them.

1. What is you current life situation and how did you happen to decide to return to school? (Use a chronological approach in telling how you decided to return to school.)

   Follow-up probes:

   a) What were: the positive contributing factors? Supports? the negative hindering factors? Barriers?
   b) How did you overcome or surmount the barriers?
   c) What sources of information did you use in reaching your decision?

2. What is your evaluation of your previous experience with and performance in education and what are your current expectations and experience with education and your performance?

   Follow-up probes:

   a) Historical experience of education and of continuing education?
   b) Your orientation to learning?
   c) Evaluation of your self as a student? Your resources? Barriers you have to your learning progress? Compensations for them?
   d) What you are experiencing now and how you feel about it?
   e) What resources do you have that enable you to cope with school?

3. What are your educational needs (needs for education), purposes in getting education, goals (outcomes aimed at), expected benefits, and rewards and incentives for getting further education? How will you know that you have achieved them?

   Follow-up probes:

   a) Has your employer expressed a need for you to obtain certain skills or upgrade skills? Are these things you want?
   b) What do hope for by getting this education?
   c) How will it benefit you?
   d) What rewards or incentives that you are aware of are available?
   e) Does your employer offer you any of these and how?
   f) How will you evaluate whether you are achieving your goals?
   g) What criteria will you use?

4. What is the attitude of important people toward education and toward your returning to school?

   Follow-up probes:

   a) Family members?
   b) Employers?
   c) Self?
   d) Faculty/Staff?
   e) Friends?

5. How has it been for you to return to school?

   Follow-up probes:

   a) What are the problems you have faced?
   b) What are the joys and benefits you have experienced?
   c) What are the supports you have found that help and encourage your progress?
   d) How did you find them?

SAMPLE STUDENT QUESTIONNAIRE

Your participation in answering these questions is voluntary. You may choose not to answer any of them.

_____ Student Number (Social Security Number)

Please check the most appropriate answer. This questionnaire represents challenges some of which everyone faces at some time in their lives. We want to know what challenges are facing you as a JRT student.

1. Highest level of school previously achieved
   - ( ) Attend High School
   - ( ) High School Grad
   - ( ) Apprenticeship
   - ( ) Attend Vocational School
   - ( ) Attend College
   - ( ) Associate's Degree
   - ( ) Bachelor's Degree
   - ( ) Master's Degree

2. Age
   - ( ) Under 21
   - ( ) 21-25
   - ( ) 26-35
   - ( ) 36-49
   - ( ) 50 or over

3. Current Income level
   a. Type
      - ( ) Individual
      - ( ) Family

   b. Level
      - ( ) No Income, Dependent
      - ( ) Under $10,000
      - ( ) $10,000-15,000
      - ( ) $15,000+--$20,000
      - ( ) $20,000+--$30,000
      - ( ) Over $30,000

4. Life Situation
   a. Marital Status (Single includes divorced and never married here)
      - ( ) Married, with children
      - ( ) Married, no children
      - ( ) Single, with children
      - ( ) Single, no children

   b. Living Situation
      - ( ) Living alone
      - ( ) Living with others, not family
      - ( ) Living with parents
      - ( ) Living with family

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4. Life Situation (Cont.)

c. Responsibilities

( ) None
( ) Self
( ) 1-2 Others
( ) 3-4 Others
( ) Over 5

d. Crises Presently Faced:

( ) Marriage
( ) Divorce
( ) Loss of Job
( ) Underemployment
( ) With Children
( ) Empty nest
( ) Retirement
( ) Change of Job
( ) Loss of Self Esteem
( ) Experiencing Physical Changes (Menopause or loss of health etc.)
( ) Ailing Parents
( ) Death of Family Member/ Friend
( ) Other

5. Current Life Stage

( ) Single, never married, no children
( ) Newly married/ coupled
( ) Parent, young children
( ) Parent, School-aged children
( ) Parent, teenage children
( ) Elderly parents
( ) Senior citizen

6. Current Career Stage

( ) No career, still searching
( ) Worked entry level job
( ) Skilled and experienced worker/technician
( ) Supervisor
( ) Mid-level management
( ) Top management
( ) CEO
( ) Business Owner

7. How is your tuition paid for:

( ) Self
( ) Job pays tuition reimbursement. -Specify conditions of reimbursement_____
( ) Student Loan
( ) Scholarship, grant
( ) Work Study
( ) Other, Specify

8. Previous experience with educational training

( ) On-the-job training
( ) "In house" classes, workshops, seminars, and/or orientations
( ) Apprenticeship
( ) College Courses (Vocational or College Transfer Courses)
( ) College workshops, seminars
( ) Professional association workshops seminars
( ) Television or telecommunication classes
( ) Correspondence
( ) Specify _____

9. Do you intend to
( ) Stay in your current Job
( ) Stay in your current Career
( ) Stay with the same company
( ) Work for certification
( ) Explore possible new careers
( ) Change Jobs
( ) Change Careers

10. Which of the following services are available to you at school and which do you use?

	Available	Use
Child Care	( )	( )
Transportation Reimbursement	( )	( )
Financial Aide	( )	( )
Career Counseling	( )	( )
Personal Counseling, Individual	( )	( )
Personal Counseling, Group	( )	( )
Skill Assessment	( )	( )
Tutoring	( )	( )
Job Placement	( )	( )
Representation in Student Government	( )	( )
Family Activities	( )	( )

11. How would you classify yourself?
( ) Lifelong learner, continually seeking new classes
( ) Periodically returning to education
( ) Using education to explore change
( ) Using education to solve a life crisis

12. I learned about the opportunities for returning to school from a
( ) Counselor
( ) Brochure
( ) Mailed class schedule
( ) Friend
( ) Counselor
( ) College Recruiter
( ) Career Fair
( ) Poster, billboard, or ad
( ) College Catalog
( ) Other

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